## **REMARKS**

Pursuant to 37 C.F.R. 1.136(a), Applicants petition the Assistant Commissioner to extend the time period to file a response to the September 3, 2004 Office Action by three (3) months, up to and including March 3, 2005. A check for \$1020.00 is enclosed to cover the cost of the petition. It is believed that no further fee is required. If, however, an additional fee is due, the Assistant Commissioner is authorized to charge such fee, or credit any overpayment, to Deposit Account 50-0320.

This paper is filed together with a Notice of Appeal, in triplicate, and required fee therefore.

The invention relates *inter alia* to the synthesis of L-2-amino-4( hydroxy-methyl phosphinyl) butyric acid (L-phosphinothricin, L-PPT) from 4-( hydroxymethylphosphinyl)-2-oxobutyric acid (HMPB, PPO) by enzymatic transamination which requires the presence of only one class of enzymes such as PPO-specific aspartate transaminase(s) (Asp-TA). The reaction is summarized as follows:

aspartate + HMPB ⇒ oxaloacetate + L-phosphinothricin (formula (I))

Applicants thank the Examiner for withdrawing the previous rejections of the claims under 35 U.S.C. §112 first paragraph and for advising Applicants that claims 19-21 contain allowable subject matter.

Claims 14-22 are pending. In order to advance prosecution, claim 14 has been amended without prejudice to Applicant's position as to the patentability of the claimed subject matter as originally presented. The amendments to claim 14 specify that the instantly claimed enzymatic reaction takes place in the present of one class of enzymes, such as PPO-specific aspartate transaminase(s) (Asp-TA) and is not possible to be executed in the presence of other

transaminases, such as for example GOT. These amendments are supported by the specification at page 2, lines 32-36. Thus, no new matter is added.

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which are believed to place the application into condition for allowance or for better condition for an appeal.

Claims 14-15 stand rejected under 35 U.S.C. 102(b/e) as allegedly anticipated by Bartsch et al. (U.S. 6, 335, 186, "Bartsch"). The Office Action states that Bartsch "anticipate the preparation of the L-PPT within the scope of the broad claimed invention" (Office Action page 2).

Applicants respectfully disagree and point out that Bartsch relates to the production of L-phosphinothricin by an enzymatic reaction that clearly requires the employment of <u>two</u> classes of enzymes. The first enzyme of the reaction <u>must be a GOT</u> (glutamate/oxaloacetate-transaminase, named transaminase 1), and the second enzyme of the reaction is the transaminase other than PPO-specific aspartate transaminase(s) (Asp-TA).

Applicants respectfully submit that the amended claim 14 clearly teaches the enzymatic conversion of aspartate to L-PPT by <u>one</u> class of enzymes, such as PPO-specific aspartate transaminase, and thus clearly specifies that the reaction is not possible in the presence of other transaminases, for example GOT. Accordingly, Bartsch does not meet each and every element of the invention as claimed and therefore cannot anticipate the present claims. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 16-18 and 22 stand rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Bartsch. Applicant urge that Bartsch does not teach, suggest or motivate a skilled artisan to practice the presently claimed invention.

As discussed above, the rejection relies upon the teaching of Bartsch which employs a coupled two-enzyme system wherein one of the enzymes is GOT. In contrast, the present invention (see page 2, line 38, continuing at page 3, line 19 of the specification) requires the enzymatic reaction to take place in the presence of only one class of enzymes (i.e. PPO-specific aspartate transaminase(s) (Asp-TA)). This distinction is specifically clarified by amendments to claim 14 which specify that the L-phosphinothricin production is executed in the presence of PPO-specific aspartate transaminase and is not possible to be executed in the presence of other transaminases, such as GOT.

Thus, it is clear that the enzymatic process of the instant invention is clearly different from the one described in Bartsch. In fact, the instant specification teaches the benefit of employing enzymes other but GOT enzymes. On page 2, lines 32-35, the specification states:

Although previously disclosed aspartate transaminases such as, for example, GOT show no conversion of PPO, aspartate transaminases from microorganisms which likewise accept L-PPT/PPO with high specificity as substrate have now surprisingly been found.

(see also page 2, lines 32-36 of the specification).

Accordingly, Bartsch does not provide one skilled in the art the motivation or suggestion to practice the instant invention. Thus, Bartsch does not render the instant invention obvious and the rejection under 35 U.S.C. Section 103(a) is unwarranted and should be withdrawn.

In view of the foregoing, Applicants respectfully request consideration and entry of the instant paper, and reconsideration and withdrawal of the final refusal.

In the alternative, Applicants respectfully request consideration and entry of the instant paper, since it places this application into better condition for purposes of appeal.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP Attorneys for Applicants

3у′

Marilyn Matthes Brogan

Reg. No. 31,223 (212) 588-0800